

# **ADEQ** **Meeting Minutes**

Arizona Department  
of Environmental Quality

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## **Klondyke Tailings Water Quality Assurance Revolving Fund (WQARF) Site Community Advisory Board (CAB) Meeting**

### **DRAFT MINUTES**

Thursday, September 27, 2007  
Klondyke School House  
500 ft Southwest of 36951 Klondyke Road  
Klondyke, Arizona

OU# 08-054

CAB Members present: Mark Haberstich (Co-chair), Lynn Skinner (Co-chair), Michael Bryce, Noralea Gale, Lauralea Bott, Bill Griffin, and Cathy Gorman

CAB Members absent: Mark Herrington, and John Luepke

ADEQ Staff in attendance: Scott Goodwin (Project Manager), Linda Mariner (Community Involvement Coordinator), Felicia Calderon (Community Involvement Coordinator), and Mel Taylor (SE Community Liaison)

Members of the public present: Jay and Ginny Schnell, Bonnie Garwood, Nancy Griffin, Robert Huff, Bill Rhea, and Philip Hedrick

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The meeting began at 4:15 p.m.

### **1. Call to Order/Introductions**

Ms. Calderon opened the meeting. Introductions of Community Advisory Board (CAB) members, ADEQ staff, and members of the public were made. Mr. Skinner elected to change the order of the agenda items.

### **2. Acceptance and/or Changes to April 25, 2007 meeting minutes**

It was noted that Mel Taylor's title should be SE not NE Community Liaison. Mr. Skinner made a motion to accept the minutes with changes. It was seconded by Ms. Bott which was approved unanimously by the board.

### **3. Discussion and Voting on CAB Application**

Mr. Skinner moved to accept Catherine Gorman as a new CAB member and Ms. Bott seconded the motion. Catherine Gorman was voted into the CAB.

#### **4. Distribution and Review of WQARF 2007 Annual Registry Report Felicia Calderon**

Ms. Calderon explained that state law required ADEQ to produce and publish an annual registry report of all the WQARF sites in Arizona and their status for public information. Currently, there are 35 WQARF sites in Arizona. All attendees were encouraged to take a report for future reference. A copy of the WQARF 2007 Annual Registry Report is located within the repositories as well.

#### **5. Current Status and Activities at Klondyke WQARF Site Scott Goodwin**

##### **A. Review Aravaipa Creek channel width, channel degradation, and aggradation**

Mr. Goodwin reviewed Aravaipa Creek channel migration and channel degradation or aggradation evaluated in an erosion analysis completed by JE Fuller Inc. in 2002. He stated that lateral erosion and changes in channel position were documented using historical aerial photographs dated from 1937 to 2002 and topographic mapping dated from 1938, 1972 and 2002. These historic records indicated up to 860 feet of lateral bank erosion occurred on Aravaipa Creek near the site since 1937. Mr. Goodwin also reviewed with the CAB a map of the various historic channel migrations from 1937 to 2002. CAB member Mr. Haberstick inquired if data presented indicated the channel was widening. Mr. Goodwin replied that the channel had expanded and was also migrating to the east. Mr. Goodwin continued to report that the mean annual erosion rate would be approximately 13 feet per year. In addition, historic topographic data used in Fuller's 2002 erosion analysis indicated that Aravaipa Creek degraded up to 10 feet from 1938 to 1972, but aggraded up to eight feet after 1972. In summary, the report concluded that Aravaipa Creek is subject to extreme rates of lateral erosion as well as significant scour and fill of the channel bed. Mr. Goodwin also presented to the CAB a graph which contained channel profile comparisons from 1938, 1972 and 2002.

##### **B. Early Response Action (ERA) update and draft proposed remedy for upper tailing pile**

Mr. Goodwin updated the CAB on the alternatives for protecting the upper pile. Mr. Goodwin reviewed the United Research Services (URS) August 2007 report that provided ADEQ with Erosion Protection Alternatives Analysis. Mr. Goodwin advised the CAB that the Erosion Protection Alternative Analysis evaluated estimated construction costs and operation and maintenance (O&M) costs for several methods of erosion protection of the upper pile. Mr. Goodwin provided and reviewed with the CAB a table of the four types of erosion protection alternatives that included: riprap, gabion mattress, soil cement, and concrete articulating mats. Also included in this table were estimated construction costs for protection from a 50-year or 100-year flood, construction effort, O&M, and an estimate of how much water would be needed to complete each erosion protection alternative. CAB member Bill Griffin requested a description of a gabion mattress. Mr. Goodwin responded that it was essentially riprap inside a steel cage. The steel cage functioned to hold the riprap in place during movement by flood flows. The construction costs for gabion mattress were reported as moderate and with a low construction water requirement. Mr. Goodwin suggested that gabion mattress appears to be the most promising alternative. Mr. Goodwin further stated that ADEQ would continue their collaborative efforts with URS to choose the appropriate remedial option. In addition Mr. Goodwin mentioned that a potential Corps of Engineers 404 permit requirement would be critical in establishing an initiation date for remediation. Mr. Goodwin also reported that remediation could commence this fiscal year, if the 404 permit is not required. In response to Mr. Huff's question regarding a projective timeframe for completion of the entire project, Mr. Goodwin responded that this remediation effort was budgeted for approximately the next three fiscal years: June 2007 through July 2010.

In addition, Mr. Goodwin addressed a CAB member's inquiry regarding remediation of the lower tailings pile. He stated that the priority is first protecting the upper pile. Flood plan analysis revealed that erosion of the upper tailings pile posed a more immediate risk. In addition Mr. Goodwin advised that continued soil sampling of the area will help to decide how much contaminated soil is coming back to the Klondyke Tailings property. Also, once it is known how much soil is returning, that soil can be consolidated with the downstream pile and the downstream pile will get the same erosion protection as the upstream pile within the long term plan.

#### **C. Remedial Investigation (RI) update and soil sampling results**

Mr. Goodwin stated that since the last CAB meeting soil sampling was still being conducted. Mr. Goodwin reported that URS collected approximately 300 additional soil samples in May 2007. Maps were presented and reviewed with the CAB detailing lead concentrations in surface soils at a 6-inch, 12-inch, and 24-inch depths. Mr. Goodwin advised the CAB that URS will continue to collect approximately 150 additional samples in fiscal year 2008, as part of the Remedial Investigation. Mr. Goodwin finally commented on the various properties that still required sampling tests to complete the Remedial Investigation.

#### **6. Distribution of Finalized Community Involvement Plan Felicia Calderon**

Ms. Calderon explained that the finalized copy of the Community Involvement Plan (CIP) was still being reviewed for final publication. The CAB was advised by Ms. Calderon that a finalized copy would be ready by the next CAB meeting in April 2008.

#### **7. Call to the Public**

None

#### **8. Future Meeting and Agenda Discussion**

The next CAB meeting was scheduled for Thursday, April 3, 2008 at 4 p.m. at the Graham County General Services Building in Safford. Proposed agenda items for the next meeting included the distribution of the finalized CIP, more soil sampling results, and the decision on which erosion alternative will be used for ERA.

#### **9. Adjournment**

Mr. Skinner adjourned the meeting at 5:06 p.m.